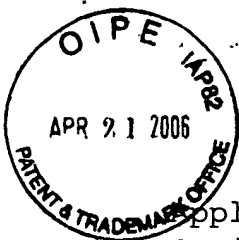


PCT
IAP6 Rec'd PCT/PTO 21 APR 2006



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Chung-Kuan Cheng, et al.

Art Unit: Unassigned

Serial No.: 10/558,842✓

Examiner: Unassigned

Filed : November 29, 2005

Title : CIRCUIT NETWORK ANALYSIS USING ALGEBRAIC MULTIGRID
APPROACH

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Dear Sir:

Applicants call attention to the attached Information
Disclosure Statement and documents listed on form PTO-1449.

This filing is being made before the receipt of a first
Office action on the merits. No fee is required.

The documents are in the English language; hence no concise
explanation is necessary per Rule 98(a)(3).

Consideration of the foregoing and enclosures plus the
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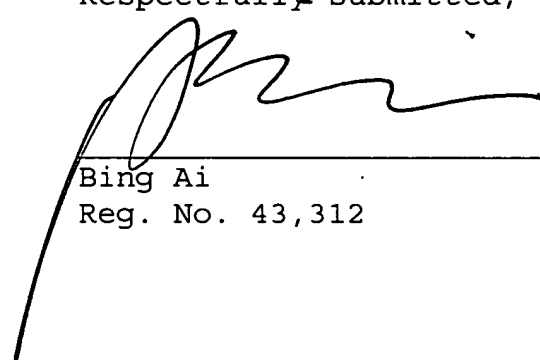
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Examiner's initials in the left column per MPEP 609 are earnestly solicited along with an early action on the merits.

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Respectfully submitted,

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Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-029US1	Application No. 10/558,842
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Chung-Kuan Cheng, et al.	
		Filing Date November 29, 2005	Group Art Unit Unassigned

U.S. Patent Documents							
Examiner Initial	Desig. ID	Document Number	Publication Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	6,577,992	06//10/03	Tcherniaev et al.			

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	AB	2004/109452	12/16/04	PCT				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AC	Black, J.R., "Electromigration Failure Modes in Aluminum Metalization for Semiconductor Devices," Proc. IEEE, pp. 1587-1594, Sept. 1969
	AD	Bobba et al., "IC power distribution challenges," IEEE/ACM International Conference on Computer Aided Design, pp. 643-650, (2001)
	AE	Brandt, A., "Multi-level adaptive solutions to boundary value problems," Math. Comput., 31: 333-390 (1977)
	AF	Briggs, W.L., "A Multigrid Tutorial," SIAM 2000, http://www.llnl.gov/casc/people/henson/mgtut/ps/mgtut.pdf (accessed on 04/06/06), 119 pages
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	AH	Chen, H. and J. Neely, "Interconnect and circuit modeling techniques for full-chip power supply noise analysis," IEEE Transactions on Components, Packaging, and Manufactured Technology, Part B, Vol. 21, No. 3, pp. 209-215, August 1998
	AI	Chen, T. and C. Chen, "Efficient Large-Scale Power Grid Analysis Based on Preconditioned Krylov-Subspace Iterative Methods," IEEE/ACM Design Automation Conference, pp. 559-562, (2001)
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	AK	Katopis, G.A., "Delta-I Noise Specification for a High-performance Computing Machine," Proc. Of the IEEE, Vol. 73, pp. 1450-1415, 1985 [Meditech, "Correction to: Katopis, G.A., 'Delta-I Noise Specification for a High-performance Computing Machine,' Proc. Of the IEEE, Vol. 73, pp. 1450-1415, 1985," Proceedings of the IEEE 70(12): 1864 (December, 1985) attached following Katopis article]
	AL	Kozhaya et al., "Multigrid-like technique for power grid analysis," IEEE/ACM International Conference on Computer Aided Design, 2001. ICCAD 2001, November 4-8, 2001, San Jose, California, pp. 480-487
	AM	Kozhaya et al., "A multigrid-like technique for power grid analysis," IEEE Transactions on Computer-Aided Design of Integrated Circuits, Volume 21, Issue 10, pp. 1148-1160, October 2002

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 15670-029US1	Application No. 10/558,842
Information Disclosure Statement by Applicant (Use several sheets if necessary) (37 CFR §1.98(b))		Applicant Chung-Kuan Cheng, et al.	
		Filing Date November 29, 2005	Group Art Unit Unassigned

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	AN	La Scala et al., "A relaxation type multigrid parallel algorithm for power system transient stability analysis," IEEE International Symposium on Circuits and Systems, 1989. May 8-11, 19989, Portland, Oregon, Volume 3, pp. 1954-1957 (1989)
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	AP	Lee, Y. and C. Chen, "Power Grid Transient Simulation in Linear Time Based on Transmission-Line-Modeling Alternating-Direction-Implicit' Methofs," IEEE/ACM International Conference on Computer Aided Design, pp. 75-80, (2001)
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	AR	Nassif, S.R., "Fast Power Grid Simulation," IEEE/ACM Design Automation Conference, pp. 156-161, (2000)
	AS	Nassif, S.R. and J. Kozhaya, "Multigrid methods for power grid simulation," The 2000 IEEE International Symposium on Circuits and Systems, 2000. May 28-31, 2000, Geneva, Switzerland, Volume 5, pp. 457-460 (2000)
	AT	Stuben, K., "A review of algebraic multigrid," Journal of Computational and Applied Mathemactics, vol. 128 (No. 1-2): 281-309 (March 1, 2001)
	AU	Stuben, K., "Algebraic Multigrid (AMG): An Introduction with Applications," GMD Report No. 70 (November 1999), 127 pages.
	AV	Taylor, S., "The Challenge of Designing Global Signals in UDSM CMOS," IEEE Custom Integrated Circuits Conference, San Diego, CA, pp. 429-435, (1999)
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	AY	Zhao et al., "Hierarchical analysis of power distribution networks," IEEE Transactions on Computer-Aided Design of Integrated Circuits and Systems," Vol. 21, No.2, IEEE, pp. 159-168, Feb. 2002
	AZ	Zhu et al., "Power network analysis using an adaptive algebraic multigrad approach," Proceedings of the Design Automation Conference, 2003, San Diego, California, June 2-6, 2003, pp. 105-108

Examiner Signature	Date Considered
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